

### Remarks

Claims 22-23, 34, 49-60, 62-72, and 79-85 are canceled herein without prejudice or disclaimer. Claims 18, 19, 24-32, 34-47, and 74-78 will be pending upon entry of this amendment. Claims 74-78 are allowed.

Claims 18 and 19 have been amended to be dependent on claim 74. Claim 24 has been amended to independent form, and claims 25, 27-30, and 32 have been amended to depend from claim 24 rather than from canceled claim 22. Claim 35 has been amended to recite an isolated polynucleotide consisting of a nucleic acid sequence that encodes a selected amino acid sequence. These amendments do not add any new matter.

#### I. Rejoinder of Claims 18 and 19

The Examiner has not rejoined claims 18 and 19, which recite methods of using the polynucleotides of the invention, because claim 18 was dependent on rejected claim 62 and because claim 19 was allegedly not drawn to a method of use of any claimed polynucleotide. Both claims 18 and 19 have been amended to depend from allowed claim 74 and are drawn to methods of using the polynucleotide of allowed claim 74. Thus, Applicants respectfully request that the Examiner rejoin and examine claims 18 and 19.

#### II. The Written Description and Enablement Rejections

The rejections of claims 22-32, 34-47, 49-60, 62-72, and 79-85 for alleged lack of written description and enablement have been maintained. The rejections are respectfully traversed.

Initially, it is noted that claims 22, 23, 34, 49-60, 62-72, and 79-85 have been canceled. Therefore, the rejections are moot with respect to those claims.

The remaining rejected claims, 24-32, have been amended so as to no longer recite percent variants or hybridizing variants of the nucleic acid sequence of SEQ ID NO:65. Applicants maintain that even without such amendment, the claims to variants of SEQ ID NO:65 found written description and enablement in the specification. Nevertheless, the amended claims no longer recite the subject matter which, according to the Examiner, lacked written description and enablement.

Claims 35-47 as amended recite an isolated polynucleotide consisting of a nucleic acid sequence encoding a selected amino acid sequence. The recited amino acid sequences

are disclosed in the specification in Table 2 at page 98. Based on this disclosure, nucleic acid sequences which encode the disclosed amino acid sequences, and how to make and use them, would have been routinely and immediately known to one of ordinary skill in the art at the time of filing, using the genetic code. Thus, the claimed polynucleotides are fully described in the specification. Reconsideration and withdrawal of this rejection is respectfully requested.

**III. Rejections Under 35 U.S.C. 102**

**A. 35 U.S.C. 102(b)**

The rejection of claim 62 as allegedly anticipated by Birkett et al. or Boehringer Mannheim 1991 Catalog or Stratagene 1991 Catalog has been maintained. The rejection is moot as claim 62 has been canceled.

**B. 35 U.S.C. 102(e)**

The rejection of claims 34, 49, 62, 65, 66, 67, 68, 69, 70, and 71 as allegedly anticipated by Bergeron et al. has been maintained. The rejection is moot as claims 34, 49, 62, 65, 66, 67, 68, 69, 70, and 71 have been canceled.

**Conclusion**

In view of the foregoing remarks, Applicants believe that this application is now in condition for allowance. An early notice to that effect is urged. The Examiner is invited to call the undersigned at the phone number provided below if any further action by Applicant would expedite the examination of this application.

Finally, if there are any fees due in connection with the filing of this paper, please charge the fees to our Deposit Account No. 08-3425. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

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